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## WHAT IS CLAIMED IS:

1. An identifying apparatus for identifying a status of an apparatus to be identified, independent of and detachably attached to the identifying apparatus, the apparatus to be identified outputting a response code obtained by encoding a predetermined identification code with a set logic and a predetermined first logic being set in the apparatus to be identified as the logic in an initial status, said identifying apparatus comprising:
  - an input port through which a signal output from the apparatus to be identified is input;
  - an output port through which a signal is output to the apparatus to be identified;
  - a storage section to store a second logic different from the first logic;
  - an identification code generating section which outputs the identification code through the output port;
  - an encoding section which converts the identification code generated by the identification code generating section individually with the first logic and the second logic stored in the storage section to normal codes;
  - a collating section which individually collates the normal codes obtained by the encoding section with the response code input through the input port;

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a change section which determines a logic determined in accordance with a predetermined rule as the second logic, and changes a logic for encoding in the apparatus to be identified to the second logic, in response to determination based on the collation result that the normal code obtained by encoding with the first logic coincides with the response code;

a storage control section which causes the storage section to store the second logic determined by the change section; and

an identifying section which identifies a status of the apparatus to be identified based on whether the response code coincides with either of the normal codes obtained by the encoding section and with which logic the normal code coincidence with the response code has been coded.

2. An identifying apparatus according to claim 1, wherein the identifying section identifies the apparatus to be identified attached thereto as unusable, when it is determined that neither of the normal codes obtained by the encoding section is coincided.

3. An identifying apparatus according to claim 1, wherein the storage control section causes the storage section to store a plurality of second logics determined by the change section at different timings.

4. An apparatus to be identified which is

attachable to a predetermined identifying apparatus and causes the identifying apparatus to identify a status of the apparatus to be identified, said apparatus to be identified comprising:

5           a response code generating section which converts an identification code output from the identifying apparatus with a set logic and supplies a response code obtained as a result of the conversion to the identifying apparatus, the response code generating  
10           section being capable of changing the logic under control of the identifying apparatus; and

          an output section which externally outputs the logic set in the response code generating section.

5. A method for identifying a status of an  
15           apparatus to be identified, which outputs a response code obtained by encoding a predetermined identification code with a set logic and in which a predetermined first logic is set as the logic in an initial state, by means of an identifying apparatus  
20           comprising an input port through which a signal output from the apparatus to be identified is input, an output port through which a signal is output to the apparatus to be identified and a storage section to store a second logic different from the first logic, said  
25           method comprising:

          outputting the identification code through the output port;

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converting the identification code individually with the first logic and the second logic stored in the storage section to normal codes;

individually collating the normal codes with the  
5 response code input through the input port;

determining a logic determined in accordance with a predetermined rule as the second logic, and changing a logic for encoding in the apparatus to be identified to the second logic, in response to determination based  
10 on a collation result that the normal code obtained by encoding with the first logic coincides with the response code;

causing the storage section to store the determined second logic; and

15 identifying a status of the apparatus to be identified based on whether the response code coincides with either of the normal codes obtained by the encoding section and with which logic the normal code coincidence with the response code has been coded.

20 6. A printing apparatus for printing an image using a consumable independent of and detachably attached to the printing apparatus, the consumable outputting a response code obtained by encoding a predetermined identification code with a set logic and  
25 a predetermined first logic being set in the consumable as the logic in an unused status, said printing apparatus comprising:

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an input port through which a signal output from the consumable is input;

an output port through which a signal is output to the consumable;

5 a storage section to store a second logic different from the first logic;

an identification code generating section which outputs the identification code through the output port;

10 an encoding section which converts the identification code generated by the identification code generating section individually with the first logic and the second logic stored in the storage section to normal codes;

15 a collating section which individually collates the normal codes obtained by the encoding section with the response code input through the input port;

a change section which determines a logic determined in accordance with a predetermined rule as  
20 the second logic, and changes a logic for encoding in the consumable to the second logic, in response to determination based on the collation result that the normal code obtained by encoding with the first logic coincides with the response code;

25 a storage control section which causes the storage section to store the second logic determined by the change section; and

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an identifying section which identifies a status of the consumable based on whether the response code coincides with either of the normal codes obtained by the encoding section and with which logic the normal code coincidence with the response code has been coded.

7. A printing apparatus according to claim 6, wherein the identifying section identifies the consumable as unused, when it is determined that the normal code obtained by converting the identification code with the first logic coincides with the response code.

8. A printing apparatus according to claim 6, wherein the identifying section identifies the consumable as used, when it is determined that any of the normal codes obtained by converting the identification code with the second logic coincides with the response code.

9. A printing apparatus according to claim 6, wherein the identifying section identifies the consumable attached thereto as unusable, when it is determined that neither of the normal codes obtained by the encoding section is coincided.

10. A printing apparatus according to claim 6, wherein the storage control section causes the storage section to store a plurality of second logics determined by the change section at different timings,

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comprises a usage count section which counts usage of  
the consumable in association with the respective  
second logics stored in the storage section, and the  
identifying section identifies the status of the  
5 consumable also in consideration of a count value of  
the usage count section.